REMARKS

Initially, Applicants would like to thank the Examiner for the courtesies that were extended during the recent in person interview held on April 5, 2006. The amendments made by this paper are consistent with the proposals discussed during the interview.

The final Office Action of January 4, 2006, considered and rejected claims 1-24.[1] In response to the final Office Action, Applicants filed a response (Amendment "B") with RCE on March 3, 2006. This response is hereby presented to further clarify the arguments and amendments in the prior response.

By this paper, claims 1, 14-16, 19, 20 and 24 have also been amended, claim 25 added, and claim 13 cancelled.[2] Accordingly, following this paper, claims 1-12 and 14-25 remain pending, of which, claims 1, 19 and 20 are the only independent claims at issue.

Embodiments of the invention are generally directed to synthesizing a font variant when a font file for the requested variant is unavailable to a computing system, or is otherwise inaccessible. Claim 1, for example, includes accessing a font file having a plurality of glyphs and standard instructions applicable for constraining each of the plurality of glyphs, where each of the plurality of glyphs stores glyph features. . The font file is used when accessing a scaled font for rendering at a target size and resolution, where the scaled font also references hints that constrain how glyphs of the scaled font are to be rendered at the target size and target resolution. The font file is fully internally constrained so as to include sufficient hints to synthesize and render the scaled font. A request for a font variant of the scaled font is then requested and corresponds to the accessed font file. The method further includes determining that a font file for the requested font variant is inaccessible and accessing one or more external font parameters that alter how the glyphs of the scaled font are to be rendered. The accessed external font

---

[1] Claims 1, 19, 20 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauermeister (U.S. Patent No. 5,586,241). Claims 2-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauermeister in view of Rappoport (WO 98/36630). Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauermeister in view of Betrisey (U.S. Patent Publ. No. 2001/0044876A). Claims 21 and 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauermeister in view of Brassell (U.S. Patent No. 5,684,510). Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauermeister in view of Qureshi (U.S. Patent No. 6,456,305). Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

[2] Support for the claim amendments are clearly supported by paragraphs 13-15, 23, 31, 32, 36 and 37, among other passages throughout the specification. Accordingly, it is respectfully submitted that the amendments to the claims do not add new matter, and entry thereof is respectfully requested.

parameters are applied to synthesize the font variant in a manner that preserves the hints from the scaled font, and glyphs of the font variant are rendered which comply with the one or more external font parameters and the preserved hints.

Claims 19 and 20 are directed to a computer program product and computing system, respectively, and generally correspond to the method of claim 1.

As further noted during the interview, Bauermeister is generally directed to an embodiment for parametrically generating characters and fonts in a distributed manner that reduces the size of an individual font file. In particular, Bauermeister teaches that a universal font generation file is created with rules that define characteristics that are common to many, if not all, glyphs in the font. A second data file is also created, and defines characteristics and nuances for individual characters. Thereafter, when a font is requested, a system combines the universal rules with the local definitions in order to render a font.

Bauermeister fails, accordingly, to disclose or suggest any method in which any font file is fully internally constrained and includes hints sufficient to synthesize and render a scaled font. In fact, Bauermeister appears to teach away from such an embodiment inasmuch as a central aspect of the embodiment in Bauermeister is its distributed nature. More specifically, Bauermeister teaches that the use of a universal set of rules which is separate from sets of font data allows the font data files to be small in size.

In addition, Applicants respectfully submit that Bauermeister fails to teach or suggest receiving a request for a font variant of the scaled font (which is based the underlying font file), determining that the font file for the requested font variant is inaccessible, and applying one or more external parameters to the scaled font to synthesize a font variant of the scaled font such that hints from the scaled font are preserved in the font variant. Instead, Bauermeister appears to teach substituting an unrequested variant for the requested variant or, in the alternative, generating a new font with an appearance that is similar to the requested variant.

For instance, Bauermeister teaches that if a font is not available, the operating system will substitute another available font. (Col. 1, ll. 40; Col. 27, ll. 23-35). In other words, Bauermeister teaches that an alternative font may be selected, but does not teach that external parameters are applied to the substituted or underlying font, and particularly not in a way that preserves the hints of the scaled font, as recited in combination with the other recited claim elements.

Alternatively, if a close font cannot be located, a replacement font may be generated by using a PANOSE number of the requested font *as the only input*. (Col. 18, ll. 43-50). A PANOSE number provides a numerical description of glyph appearance and features. (Col. 18, ll. 37-43; Col. 19, ll. 1-35). Using only this number, the Bauermeister system generates a font file that is then used in connection with the universal font rules to generate a font similar to the requested variant. (Col. 18, ll. 46-54). Stated another way Bauermeister teaches that a PANOSE number is used to generate a font file, but does not teach that an external parameter is applied to a scaled font that is based on a font file that includes a plurality of glyphs). Instead, Bauermeister uses the PANOSE number to generate the file in the first instance, and without application to any additional font file, let alone the underlying scaled font from which the variant is requested. Thereafter, the newly created font is used with universal rules that do not fully constrain a font and which, while applicable to multiple fonts, do not appear to include a plurality of glyphs.

The other art of record fails to remedy the deficiencies of Bauermeister. For instance, among other things, the Rappaport reference also fails to teach or suggest receiving a request for a font variant of the scaled font corresponding to the accessed font file; determining that a font file for the requested variant is inaccessible; and applying one or more external font parameters to the scaled font to synthesize the requested font variant such that hints from the scaled font are preserved in the font variant.

In particular, Rappaport discloses a font manipulation system in which a font designer can create new fonts and dynamically alter the behavior of letters through the manipulation of external parameters. (Abstract). In practice, the invention permits a font designer to change an underlying font in any number of ways to alter the visual appearance of a glyph or set of glyphs. For example, the font designer may change one or more of the: font family axes, character weight, character slant, character height, character width, and serif shape (p. 25, ln. 21 to p. 26, ln. 10; Figs. 18-24).

Bases on changes input by the font designer, the visual appearance of the characters is modified and displayed. However, when an external parameter specifying a change in appearance is received, the internal constraints thereby become invalid, and a constraint evaluation process is initiated. (p. 12, ll. 25-28). The constraint evaluation process uses

directional constraints and ensures that after font modification the visual appearance is desirable. (p. 18, ll. 6-27).

Rappaport fails to teach, however, that a desirable appearance is maintained by preserving the hints of the scaled font. In fact, and to the contrary, Rappaport teaches that the original constraints are actually removed from the font and replaced with "Xabs" or "Yabs" values. (p. 19, ll. 19-25; p. 20, ll. 6-11). Moreover, Rappaport illustrates the application of various external parameters in manners which alter original font constraints. For example, Figures 8A-8D illustrate the bolding of a letter "B." To bold a letter, the stroke width of the character is increased. However, as illustrated, when the stroke width is increased, the reference height and width of the character is also changed. Similar examples are illustrated in Figures 16A-16C, 17A-17C, and 18B, in which as the stroke width of a letter is changed, the corresponding standard height and/or width of the letter also changes.

Yet additional examples are illustrated, for instance, in Figures 18A, 23A, 23B and 24. In these Figures, for example, external parameters specify a change in letter angle. Notably, however, as the letter angle changes, the standardized character width also changes.

Accordingly, while Rappaport teaches the use of an evaluation system to keep characters within certain constraints, these constraints do not appear to be the constraints or hints of the underlying font file, as claimed in combination with the other recited claim elements.

In view of the foregoing, Applicants respectfully submit that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time.[3] It will be appreciated, however, that this should not be construed as Applicants acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicants reserve the right to challenge any of the purported teachings or assertions made in the last action, including any official notice, at any appropriate time in the future, should it arise.
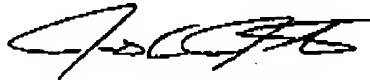
---

[3] Applicants note, however, that by this paper, claim 25 has been added to correct the omission of the claim in the prior response. Applicants respectfully submit that claim 25 is allowable over the art of record for at least the same reasons as independent claim 1, and for the reasons recited in Applicants' Amendment "B".

For at least the foregoing reasons, Applicants respectfully submit that the pending claims are neither anticipated by nor made obvious by the art of record. In the event that the Examiner finds and remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 12 day of March, 2006.

Respectfully submitted,

RICK D. NYDEGGER
Registration No. 28,651
JENS C. JENKINS
Registration No. 44,803
Attorneys for Applicant
Customer No. 047973

RDN:JCJ:ppa
PPA0000003114V001

Page 13 of 13